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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|-------------------------------|-----------------------|---------------------|------------------|
| 10/810,883 | 03/29/2004 | Hideki Koyama | 2018-869 | 1086 |
| 23117 NIXON & VAI | 7590 09/18/200 NDERHYE, PC | 18/2007 EXAMINER | | |
| 901 NORTH G | LEBE ROAD, 11TH F | BERTHEAUD, PETER JOHN | | |
| ARLINGTON, VA 22203 | | | ART UNIT | PAPER NUMBER |
| | | | 3746 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 09/18/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|--|--|--|--|--|
| Office Action Summan | 10/810,883 | KOYAMA ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Peter J. Bertheaud | 3746 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 04 Se | eptember 2007. | | | | | |
| 2a)⊠ This action is FINAL . 2b)☐ This | ☐ This action is FINAL . 2b)☐ This action is non-final. | | | | | |
| , — | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1,4 and 6-11</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1,4 and 6-11</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or | r election requirement | | | | | |
| o) Claim(s) are subject to restriction and/o. | r election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | | |
| 10)⊠ The drawing(s) filed on <u>29 <i>March</i> 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of: | priority under 35 U.S.C. § 119(a |)-(d) or (f). | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment/c) | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail D | ate | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal F 6) Other: | aton rippiioation | | | | |

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DETAILED ACTION

1. This office action is in response to the amendments of 9/4/2007. It is noted that claims 1, 4, and 6 have been amended, claims 2, 3, and 5 have been cancelled, and claims 7-11 have been added.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 4, and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemmner 5,338,151.

Kemmner discloses a fuel pump assembly comprising a suction-side cover 38 having a fuel inlet 58, an electric motor 20 disposed between said suction-side cover 38 and said exhaust-side of the fuel pump, a pump casing 28 disposed between said electric motor 20 and said suction-side cover 38, a passage member having a pressure boosting passage 52 disposed between said suction-side cover 38 and said pump casing 28, an impeller 34 disposed in the pressure boosting passage 52 to be rotated by said electric motor 20, and a cylindrical housing 54 for accommodating said suction-side cover 38, said pump casing 28 and said impeller 34, without any additional seal member therebetween, wherein: said suction-side cover 38 comprises a resinous disk

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member (see col. 3, lines 35-38) that has a shoulder (see rounded portion of 38 at bottom of Fig. 2 that is held in by inwardly shaped edge 56) having a round surface in contact with a portion of said cylindrical housing 54 that is clinched at said shoulder with a prescribed pressure; and said suction-side cover 38 is arranged to decrease a stress concentration generated by the prescribed pressure at the round surface. Kemmner further teaches a concave pressing surface 56 of the cylindrical housing; wherein the concave pressing surface is a round surface having a radius larger than the radius of the round surface of said shoulder (see 38). Kemmner further teaches that an exhaust-side cover having a fuel outlet would be inherently obvious due to the system setup in Fig. 1 as well as it being conventional in the art.

Kemmner discloses the general conditions of the claimed invention except for: limiting the round surface to be 2mm or longer and the shoulder having a thickness between 4mm and 5mm, or the ratio of thickness of said shoulder to said suction-side cover being between 0.57 and 0.71. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the shoulder within these parameters, since the claimed values are merely an optimum or workable range. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) (see MPEP 2144.05 II. A - Optimization Within Prior Art Conditions or Through Routine Experimentation).

Furthermore, while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in

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terms of structure rather than function, because apparatus claims cover what a device is, not what a device does (Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990)). Thus, if a prior art structure is capable of performing the intended use as recited in the preamble, or elsewhere in a claim, then it meets the claim.

In reference to claim 4, the determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process. That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 4, and 6-11 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Bertheaud whose telephone number is (571) 272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571) 272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PJB

9/12/07

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